# **End of Result Set**

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L2: Entry 3 of 3

File: USPT

Sep 21, 1999

DOCUMENT-IDENTIFIER: US 5955475 A -

TITLE: Process for manufacturing paroxetine solid dispersions

#### Brief Summary Text (54):

As used herein, the term "pharmaceutically acceptable salt" refers to derivatives of paroxetine wherein paroxetine is modified by making acid addition salts of the compound. Examples of pharmaceutically acceptable salts include, but are not limited to, mineral or organic acid salts of the basic piperidine residue; and the like. The pharmaceutically acceptable salts of paroxetine include conventional non-toxic salts or quaternary ammonium salts, for example, from non-toxic inorganic or organic acids. For example, such conventional non-toxic salts include those derived from inorganic acids such as hydrochloric, hydrobromic, sulfuric, sulfamic, phosphoric, nitric and the like; and the salts prepared from organic acids such as acetic, propionic, succinic, glycolic, stearic, lactic, malic, tartaric, citric, ascorbic, pamoic, maleic, hydroxymaleic, phenylacetic, glutamic, benzoic, salicylic, sulfanilic, 2-acetoxybenzoic, fumaric, toluenesulfonic, methanesulfonic, ethanesulfonic, ethanedisulfonic, oxalic, isethionic, and the like.

L10 ANSWER 7 OF 8 USPATFULL

ACCESSION NUMBER: 2001:162866 USPATFULL

Triglyceride-free compositions and methods for improved TITLE:

delivery of hydrophobic therapeutic agents

Patel, Mahesh V., Salt Lake City, UT, United States INVENTOR (S):

Chen, Feng-Jing, Salt Lake City, UT, United States

PATENT ASSIGNEE(S): Lipocine, Inc., Salt Lake City, UT, United States (U.S.

corporation)

NUMBER KIND DATE

-----US 6294192 B1 20010925 US 1999-258654 19990226 PATENT INFORMATION:

19990226 (9) APPLICATION INFO .:

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Page, Thurman K.

ASSISTANT EXAMINER: Channavajjala, Lakshmi

LEGAL REPRESENTATIVE: Reed, Dianne E.Reed & Associates

NUMBER OF CLAIMS: 74 EXEMPLARY CLAIM: 1

1 Drawing Figure(s); 1 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 3094

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to triglyceride-free pharmaceutical

compositions for delivery of hydrophobic therapeutic agents.

Compositions of the present invention include a hydrophobic therapeutic agent and a carrier, where the carrier is formed from a combination of a hydrophilic surfactant and a hydrophobic surfactant. Upon dilution with

an aqueous solvent, the composition forms a clear, aqueous dispersion of the surfactants containing the therapeutic agent. The invention also provides methods of treatment with hydrophobic

therapeutic agents using these compositions.

L10 ANSWER 8 OF 8 USPATFULL

ACCESSION NUMBER: 2001:93131 USPATFULL

Solid carriers for improved delivery of active TITLE:

ingredients in pharmaceutical compositions

Patel, Mahesh V., Salt Lake City, UT, United States INVENTOR (S):

Chen, Feng-Jing, Salt Lake City, UT, United States Lipocine, Inc., Salt Lake City, UT, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE

-----PATENT INFORMATION:

US 6248363 B1 20010619 US 1999-447690 19991123 (9) APPLICATION INFO.:

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Spear, James M.

LEGAL REPRESENTATIVE: Reed, Dianne E.Reed & Associates

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

4 Drawing Figure(s); 4 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 3302

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides solid pharmaceutical compositions for AB improved delivery of a wide variety of pharmaceutical active ingredients contained therein or separately administered. In one embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier including a substrate and an encapsulation coat on the substrate. The encapsulation coat can include different combinations of pharmaceutical active ingredients, hydrophilic surfactant, lipophilic surfactants and triglycerides. In another embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier being formed of different combinations of pharmaceutical active ingredients, hydrophilic surfactants, lipophilic surfactants and triglycerides. The compositions of the present invention can be used for improved delivery of hydrophilic or hydrophobic pharmaceutical active ingredients, such as drugs, nutrionals, cosmeceuticals and diagnostic agents.

PATENT ASSIGNEE(S):

L10 ANSWER 4 OF 8 USPATFULL

ACCESSION NUMBER: 2002:102031 USPATFULL

TITLE: Compositions and methods for improved delivery of

ionizable hydrophobic therapeutic agents

INVENTOR(S): Chen, Feng-Jing, Salt Lake City, UT, United States

Patel, Mahesh V., Salt Lake City, UT, United States Lipocine, Inc., Salt Lake City, UT, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6383471 B1 20020507 APPLICATION INFO.: US 1999-287043 19990406 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Bawa, Raj

LEGAL REPRESENTATIVE: Reed, Dianne E., Reed & Associates

NUMBER OF CLAIMS: 114 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 3051

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to a pharmaceutical composition including a hydrophobic therapeutic agent having at least one ionizable functional group, and a carrier. The carrier includes an ionizing agent capable of ionizing the functional group, a surfactant, and optionally solubilizers, triglycerides, and neutralizing agents. The invention further relates to a method of preparing such compositions by providing a composition of an ionizable hydrophobic therapeutic agent, an ionizing agent, and a surfactant, and neutralizing a portion of the ionizing agent with a neutralizing agent. The compositions of the invention are particularly suitable for use in oral dosage forms.

L10 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:12137 CAPLUS

134:61565 DOCUMENT NUMBER:

Solid and semi-solid formulations of paroxetine with TITLE:

increased stability and bioavailability

INVENTOR (S): Rosenberg, Joerg; Breitenbach, Joerg; Liepold, Bernd

PATENT ASSIGNEE(S): Knoll A.-G., Germany Ger. Offen., 4 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

magnesium stearate 1.

PATENT INFORMATION:

PATENT NO.	KIND DATE	7	APPLICATION NO.	DATE
DE 19930454	A1 20010	104 I	DE 1999-19930454	19990702
WO 2001001956	A2 20010	111 7	NO 2000-EP5848	20000623
WO 2001001956	A3 20010	712		
W: AU, BR,	CA, CN, JP,	US		
RW: AT, BE,	CH, CY, DE,	DK, ES, FI	FR, GB, GR, IE	I, IT, LU, MC, NL,
PT, SE				
EP 1189614	A2 20020	327 I	EP 2000-942125	20000623
R: AT, BE,	CH, DE, DK,	ES, FR, GB	GR, IT, LI, LU	, NL, SE, MC, PT,
IE, 'FI				
PRIORITY APPLN. INFO	. :	DE :	L999-19930454 A	19990702
		WO 2	2000-EP5848 W	20000623

The invention concerns solid and semi-solid formulations of paroxetine and AB its physiol. acceptable salts that contain the mol.-dispersed active substance in a matrix composed of a synthetic polymer with glass transition temp. > 90.degree.C. The invention also concerns the prepn. of the formulations. 80% Of the active substance is bioavailable within 30 min after dosage. Paroxetine or its salt is mixed and melted with the matrix material in the extruder, followed by the forming procedure. In another version paroxetine, ammonium chloride and matrix material are coextruded. The product is used for the prepn. of tablets. Thus 30 wt./wt.% paroxetine hydrochloride and 70 wt./wt.% copovidon (N-vinylpyrrolidone-vinylacetate copolymer 60/40) were processed in a twin-screw extruder at 145.degree.C. The product was used as for the formulation of tablets with the following compn. in wt./wt.%: paroxetine hydrochloride extrudate 38; microcryst. cellulose 15; calciumhydrogen

phosphate 35; sodium-croscarmellose 10; highly disperse silica 1;

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L1
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN
     61869-08-7 REGISTRY
     Piperidine, 3-[(1,3-benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)-,
CN
     (3S,4R) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Piperidine, 3-[(1,3-benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)-,
     (3S-trans) -
OTHER NAMES:
     (-)-Paroxetine
CN
CN
     (-)-trans-4-(4-Fluorophenyl)-3-(3,4-methylenedioxyphenoxymethyl)piperidine
CN
     Aropax
     BRL 29060
CN
     FG 7051
CN
     Paroxetine
CN
     Paxil
CN
FS
     STEREOSEARCH
DR
     63952-24-9
     C19 H20 F N O3
MF
CI
     COM
LC
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
     STN Files:
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,
       CEN, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES,
       EMBASE, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PROMT, RTECS*, SYNTHLINE,
       TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                      WHO
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Absolute stereochemistry. Rotation (-).

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1197 REFERENCES IN FILE CA (1962 TO DATE)
24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1199 REFERENCES IN FILE CAPLUS (1962 TO DATE)

Patent LA German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE --------------20010104 DE 1999-19930454 19990702 PΙ DE 19930454 A1 WO 2001001956 . A2 20010111 WO 2000-EP5848 20000623 WO 2001001956 A3 20010712 W: AU, BR, CA, CN, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 1189614 A2 20020327 EP 2000-942125 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, R: IE, FI PRAI DE 1999-19930454 A 19990702 WO 2000-EP5848 W 20000623 The invention concerns solid and semi-solid formulations of AB paroxetine and its physiol. acceptable salts that contain the mol.-dispersed active substance in a matrix composed of a synthetic polymer with glass transition temp. > 90.degree.C. The invention also concerns the prepn. of the formulations. 80% Of the active substance is bioavailable within 30 min after dosage. Paroxetine or its salt is mixed and melted with the matrix material in the extruder, followed by the forming procedure. In another version paroxetine, ammonium chloride and matrix material are coextruded. The product is used for the prepn. of tablets. Thus 30 wt./wt.% paroxetine hydrochloride and 70 wt./wt.% copovidon (N-vinylpyrrolidone-vinylacetate copolymer 60/40) were processed in a twin-screw extruder at 145.degree.C. The product was used as for the formulation of tablets with the following compn. in wt./wt.%: paroxetine hydrochloride extrudate 38; microcryst. cellulose 15;

calciumhydrogen phosphate 35; sodium-croscarmellose 10; highly disperse

silica 1; magnesium stearate 1.

CODEN: GWXXBX

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L4
     ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:977660 CAPLUS
DN
     138:29184
     A process for preparing paroxetine hydrochloride limiting formation of
TI
     pink compounds
IN
     Avrutov, Ilya; Pilarski, Gideon
     Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA,
PA
so
     PCT Int. Appl., 25 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                                          WO 2002-US19016 20020614
PΙ
     WO 2002102382
                     A1
                            20021227
                      C2
                            20030306
     WO 2002102382
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-298603P
                            20010614
                     P
     US 2001-326993P
                            20011005
                      Ρ
     US 2002-346048P
                      Ρ
                            20020104
     The present invention provides a process for prepg. paroxetine
AB
     -HCl (I) from paroxetine base which provides I substantially
     free of pink-colored compds. or an impurity identified by an HPLC RRT of
     about 1.5. The processes utilize a buffer, a molar ratio of HCl to
     paroxetine base of <1, and crystallize/recrystallize in the
     presence of an effective amt. of an anti-oxidant. A preferred way to
     create a buffer is by using ammonium chloride. A
     preferred anti-oxidant is ascorbic acid. The present invention also
     provides for re-crystg. I prepd. by the above methods or any other methods
     in the presence of an effective amt. of an anti-oxidant such as ascorbic
     acid. A preferred solvent system for recrystn. is a mixt. of acetone and
     methanol. Processes of the present invention can combine these various features. An aq. soln. of ammonium chloride in water
     was added to a soln. of paroxetine base in toluene. The
     reaction mixt. was intensively stirred at ambient temp. while concd. HCl
     was added in such manner that the pH of the reaction mixt. stayed between
     3.5 and 8. A ppt. formed which was filtered and then washed with toluene
     and water.
                The resulting material was dried at 60.degree. under vacuum to
             The soln. did not develop a pink color after standing for 20 min.
     give I.
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 9
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS
L4
     2001:12137 CAPLUS
AN
DN
     134:61565
     Solid and semi-solid formulations of paroxetine with increased stability
TI
     and bioavailability
IN
     Rosenberg, Joerg; Breitenbach, Joerg; Liepold, Bernd
PA
     Knoll A.-G., Germany
     Ger. Offen., 4 pp.
SO
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